

REMARKS

Claims 63-67 and 69-91 are pending in the present application. All of the pending claims have been rejected under 35 U.S.C. § 103(a) as obvious over Korb et al., U.S. Patent No. 4,195,450, in view of Nelson et al., U.S. Patent No. 6,088,895. The applicant respectfully traverses the rejections and requests reconsideration thereof in light of the remarks set forth below.

Although the Office Action does not specifically identify claims 69-71 as having been rejected, the applicant has considered them to have been rejected for the same reasons as the remainder of the claims, since there is no indication of allowability of those claims stated in the Office Action.

Turning now to the merits of the claims, as understood, Korb et al. teach the descaling of a metal strip by forming a loop in the strip, spraying a jet of liquid containing abrasive particles at high velocity at the metal strip, and thereby cracking and removing a layer of scale from the strip. Korb et al. specifically teach the use of steel granules, corundum, and chalk for the abrasive medium, and indicate at column 1, lines 12-14, that “scouring or polishing solid particles, such as steel granules, corundum, sand, chalk, or the like” are useful in both prior-art and Korb et al.’s methods. At column 2, lines 24-28, Korb et al. teach that “[t]he flow along the concavely curved area of the sheet metal strip has the effect that the heavier solid particles are accelerated by a centrifugal effect on to the surface to be treated and flow therealong.”

It is respectfully submitted that these two aspects of Korb et al., when read together, clearly teach away from the use of smooth-edged media during descaling. Korb et al. group steel granules, corundum, sand, and chalk together as “like” materials (see column 1, line 13), but it is respectfully submitted that these materials are united by only three physical characteristics: they

are solid, they are granular, and they are specifically not smooth-edged media. Korb et al. suggest that these media be used in such a way that they are directed to follow the curve of the loop in the sheet metal strip, in order to “scour” or “polish” the surface (see col. 1, line 12). Smooth-edged media would be less than effective to scour or polish the surface in the manner suggested by Korb et al., because the smooth edges of the media would not cut into the scale. Therefore, it is respectfully submitted that Korb et al.’s clearly stated motivation to select the media suggested is for their principal common characteristic: that they are rough-edged media.

By contrast, however, claim 63 recites the use of smooth-edged media in order to crack the layer of scale. Rather than cracking the layer of scale with smooth-edged media, Korb et al. cracks the layer of scale by forming the loop (column 2, line 28-31) then scours or polishes the metal strip using rough-edged media.

It is also respectfully submitted that nothing in Nelson et al. serves to correct this deficiency in Korb et al. Indeed, No. 34 in the Nelson et al. figure is simply identified as a “shot blaster” with no identification of the media used.

Because neither Korb et al. nor Nelson et al., nor any of the other references previously cited, teach the use of smooth-edged media in the step of cracking the layer of scale, and because Korb et al. specifically teaches away from the use of smooth-edged media, it is respectfully submitted that no combination of the cited references renders the invention as claimed in claim 63 obvious, and that claim 63 is patentable.

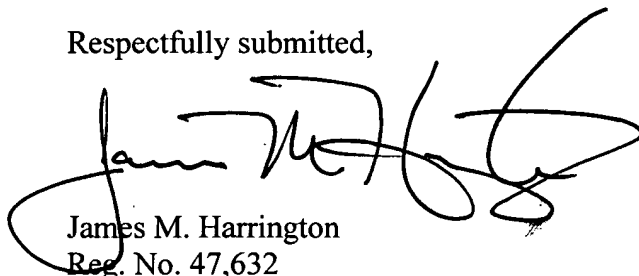
Because each of the other pending claims depend, directly or indirectly, from claim 63, it is respectfully submitted that claims 64-67 and 69-91 are patentable at least for the same reasons identified above.

CONCLUSION

Based on all the foregoing, it is respectfully submitted that the application is in condition for allowance. Reconsideration of the rejections, an early indication of allowability, and passage to issuance are earnestly solicited.

The Office is invited to contact the attorney for the applicant at (704) 331-5792 in order to expedite the resolution of any outstanding issues.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'James M. Harrington', is written over the typed name and registration number.

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